IN THE SPECIFICATION

Please amend paragraph [0031] as follows:

The first table 310a is a lookup table for 8 most significant bits (MSBs) of an IP address, the second table 330a is a lookup table for ninth through twentieth bits of the IP address, and the third table 350a is a lookup table for 12 least significant bits (LSBs) of the IP address. The forwarding table 30a has an 8-14-10 multi-bit trie structure. The stride of each level of the multi-bit trie structure of the forwarding table 30a may be differently determined in consideration of the optimization and updating of memory.